

Pakistani opposition expresses willingness to talk with Bhutto

AWALPINDI, April 13 (AFP). — The Pakistani opposition today expressed its willingness to consider any proposals by Prime Minister Zulfikar Ali Bhutto to resolve the political crisis in the country. Mr. Nasir Khan, acting president of the nine-party opposition Pakistan National Alliance (PNA), said if the alliance receives any "appropriate" formula it would be given due thought. Mr. Nasirullah, who is the only major PNA leader not yet imprisoned, was talking to newsmen in Peshawar, capital of northwest frontier province, after meeting the detained PNA president Maulana Murtaza Bhutto.

Volume 2, Number 424

King Hussein: We must turn from state services to resources production

AMMAN (JNA). — His Majesty King Hussein said Wednesday high time for Jordan to turn from state services to production. The king, who is also the head of the state, said the country must concentrate on the production of wealth and the use of resources to pay for the rise in the cost of services, the entire must turn to production. He said the state must create a new formula for development that will enable the human resources of the country to play a large role in the process, he went on. The king called on rural, municipal and district leaders to go beyond the present formula of providing services to citizens upon request and to look for a formula of organized cooperation.

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AMMAN, THURSDAY, APRIL 14, 1977 — RABIE AL THANI 25, 1397

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His Majesty King Hussein addresses governors and councilors at Al Hussein Youth City Wednesday. (JT photo).

France made "perfect" supply airlift to Zaire

PARIS, April 13 (AFP). — France began preparing the military supplies airlift to Zaire about two weeks before D-Day, setting up logistic support "stepping stones" along the way, well-informed sources revealed today.

One of these stepping stones was the Senegalese capital of Dakar, the sources said, where -- as at the other, undisclosed, spots -- aircraft engines and other spare parts were put in place ready for the operation.

These were to keep the French air forces Transall cargo planes in the air as they carried out gruelling round-the-clock missions between Rabat, in Morocco, and the Zairese airstrips at Kolwezi and Lubumbashi, the sources said.

The preparations were a well-kept secret, and it is believed here the French probably managed to disguise the preliminary ground-laying flights as training or photographic missions.

The operation was planned at top level from the French operations centre bunker under the Defence Ministry here, the sources said.

French military chiefs are pleased at the smooth-running of the operation, and believe it demonstrates that France has the means to carry out long-distance missions in support of its African allies, particularly the French-speaking countries, the sources said.

Owen, Vorster discuss new proposals on Rhodesia

CAPE TOWN, April 13 (Agencies). — British Foreign Secretary David Owen today spent more than three hours with South African Prime Minister John Vorster discussing new Anglo-American proposals aimed at reviving negotiations to take Rhodesia to black majority rule next year.

He then held talks here with the Prime Minister of Rhodesia's white minority government, Mr. Ian Smith.

Mr. Vorster's approval for the latest Rhodesia proposals was regarded as essential, and British sources said he raised no objection to them in today's protracted discussions with Dr. Owen. Their talks ran more than an hour overschedule.

Dr. Owen has stated that he believes Rhodesia's 6.4 million blacks should take over from the 270,000 whites in 1978. The British sources said Mr. Vorster did not try to dissuade Dr. Owen from pursuing this line in the talks with Mr. Smith. The discussions with Mr.

Vorster were "patient, detailed and careful and in no way bad-tempered," the sources added.

The key issue in Dr. Owen's meeting with Mr. Smith was expected to be just when the Rhodesian leader is willing to relinquish white minority rule. In London, a Foreign Office spokesman reported today that moderate Rhodesian nationalist leader Rev. Ndabaningi Sithole will hold talks with Dr. Owen in London next week.

The date of this meeting has not yet been arranged but April 19 is being considered, the spokesman said. In separate development from Damascus today it was officially announced that Dr. Owen will make an official visit to Syria in the last week of this month.

Unconfirmed reports reaching here from London indicated Dr. Owen would arrive on April 26 from Cairo. It will be the first visit to Syria by a British foreign secretary.

Given the peace which now reigned in Cyprus and the U.N.'s known "financial problems", Mr. Denktash said, there was no longer any reason for peace-keeping troops on the island. A "small contingent of observers" would be sufficient, he added.

Prince Hassan tours Syrian centres

DAMASCUS, April 13 (R). — His Highness Crown Prince Hassan today visited the Nuclear Medicine Centre in Al Muwasat Hospital as well as the offices of the General Federation of Labour Unions in Damascus.

He was accompanied by Syrian Premier Abdul Rahman Khleifawi.

The prince, who arrived here yesterday on a three-day visit to Syria, was also visiting the town of Quneitra, destroyed during the 1973 Arab-Israeli war, and an advanced military position.

However, the Prince cancelled a scheduled flight to the Euphrates Dam site in the northern part of the country because of bad weather.

The Prince, who met President Hafez Assad and had talks with the premier yesterday on closer coordination between the two countries, in an interview published by the government newspaper Tichrin today called for "expanding the dialogue" to achieve full integration.

He also called for increased Arab solidarity and said "a unified Arab stand is a basic element for Arab progress."

Referring to the situation in Lebanon, Prince Hassan said he hoped Lebanese President Elias Sarkis and his government would succeed in resolving differences and rebuilding the war-torn country, "thus averting any gap, especially in the sensitive south."

He also discussed Jordanian-Palestinian contacts, describing these as frank and clear. "We support the Palestine Liberation Organisation in advocating the Palestinians' right to their land and seeking other legitimate rights," Prince Hassan said.

He added that there were no problems about Jordanian-Palestinian contacts "because the framework of political cooperation at this stage -- is clear."

The prince is due to wind up his visit to Syria tomorrow.

Badran visits Saudi Arabia

AMMAN (JNA). — Prime Minister Mudar Badran Thursday leaves on a short visit to Saudi Arabia carrying a message to His Highness Prince Fahd bin Abdul Aziz.

During his one-day visit Premier Badran will hold talks on bilateral relations and the Arab situation.

Khaddam to visit U.S. on April 21

DAMASCUS, April 13 (R). — Syrian Foreign Minister, Abdul Halim Khaddam will fly to Washington on April 21 for talks with U.S. Secretary of State Cyrus Vance, it was officially announced today. He will also meet President Carter during his two-day visit. Mr. Khaddam will fly to Washington after accompanying President Hafez Assad on a trip to Moscow next Monday.

The official announcement of Mr. Khaddam's visit to Washington said only that he would discuss the Middle East and political moves concerning the region.

He will be in the U.S. immediately before His Majesty King Hussein who is due there on April 25.

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Denktash calls for departure of U.N. troops in Cyprus

NICOSIA, April 13 (AFP). — Turkish-Cypriot leader Rauf Denktash called today for the departure of United Nations peace-keeping troops in Cyprus, saying the fighting between the Greek and Turkish communities was "definitively" over.

Mr. Denktash, President of the Cypriot "Turkish Federated State", told Agence France Presse however that a political solution to the island's problems had not yet been achieved.

Although the latest round

Clashes reported in Beirut

BEIRUT, April 13 (AFP). — Elements of Palestinian commandos and Arab League peace-keeping troops clashed in street battles here today and informed sources reported that three people were wounded in an explosive attack against the headquarters of the hardline rightwing National Liberal Party. One street battle broke out after an Arab League armoured vehicle came under automatic weapons fire in western Beirut. The peace-keeping soldiers riposted with heavy weapons fire and other troops cordoned off the sector. Further shots were heard later as house-to-house searches were carried out and an explosion rocked the district. Casualties in the incidents were not known. The Palestinians involved in the fighting were from the hardline "Popular Front for the Liberation of Palestine -- General Command".

In a meeting with Kuwaiti F.M.

U.S. urges Arab effort to end fighting in southern Lebanon

KUWAIT, April 13 (R). — The United States told Kuwait today it wished to see an Arab effort to end fighting in southern Lebanon. Foreign Ministry Under Secretary Rashed Al Rashed said here.

The American view was conveyed to Foreign Minister Sheikh Sabah Al Ahmed Al Sabah by U.S. Ambassador Frank Maestroni, he added.

Mr. Maestroni requested the meeting with the minister and stressed that his country "wished to see the Arab states play an effective role in bringing stability to southern Lebanon because the United States wished to see stability restored there," Mr. Rashed said.

The Kuwaiti foreign minister also had a meeting today with Palestinian representatives here which was attended by the Kuwaiti ambassador to Lebanon, Mr. Abdul Hamid Al Bejjani.

Discussions at the meeting centered on the Cairo agreements, according to Mr. Khalid Al Hassan, a member of the central committee of Fateh.

Mr. Hassan said a further meeting with the minister and Mr. Bejjani would be held on Saturday, the day before Mr. Bejjani was due to return to Beirut.

On the battle front in south-

ern Lebanon, a report from Ibi As Saqi, a strategic front-line village -- said that the major battlefronts were relatively quiet today.

Military commanders said they were adhering to instructions issued by Palestinian commando chief Yasser Arafat last Sunday to stop pushing against strongholds of Israeli-backed Lebanese rightists near the borders with Israel.

But the commanders said that Ibi As-Saqi and nearby Khyam, captured by Lebanon's leftist-Palestinian alliance last week, had come under artillery fire from positions inside Israel and from the rightist-held towns of Qle'a and Marjayoun overnight.

Calm was also reported from other fronts in the sensitive south after sporadic overnight shelling of the leftist-controlled towns of Nabatieh, Taybeh and Arnoun, north, west and southwest of Ibi As Saqi respectively.

Commanders here denied reports from Israel that the leftist-Palestinian alliance, which is fighting under Palestinian command, had attacked and captured the rightist-held village of Deir Mimas, 2 kms from the Israeli border.

In a separate development from Tel Aviv, informed sources

said that Israel has told the United States and other western nations it will not permit Palestinian guerrillas to deploy freely along its northern borders.

The Israeli message was sent to Washington and other capitals 48 hours ago and had been passed on to Lebanon and Syria, the sources said.

Foreign minister Yigal Allon said last night that Israel would not tolerate attacks on Lebanese Christian villages close to the Israeli border. Informed sources said today that Mr. Allon meant Israel would not permit these villages to be overrun by Palestinian guerrillas or Lebanese leftists.

In Damascus, President Hafez Assad and the Lebanese Foreign Minister, Mr. Fuad Butros, today discussed how Syria could help restore life to normal in Lebanon.

Earlier the Lebanese visitor had separate meetings with the Syrian Foreign Minister, Mr. Abdul Halim Khaddam, and the Defence Minister, Mr. Mustafa Tlas.

Rightwing leader Pierre Gemayel is due to visit Damascus tomorrow and press reports said he would be followed by Dr. Chamoun and another rightist, ex-President Suleiman Frangieh.



READY FOR WAR -- A Phalangist soldier, one hand cradling an M-16 and the other holding a 50 caliber machinegun, rides a top on APC on his way to join the battle in south Lebanon.

Spanish army generals accept Communist Party legalisation

MADRID, April 13 (AFP). — Spain's top army generals decided, in a five-hour meeting last night, to "accept for the sake of patriotism" the government's decision to legalise the Communist Party, reliable sources disclosed here today.

The generals said however they found the "fait accompli" of the party legalisation to be in a way "repulsive", the sources said.

The group met last night under Gen. Vega Rodriguez, the army chief of staff.

Meanwhile, reliable sources said that Merchant Navy Under

Secretary Adm. Enrique Amador Franco had resigned as a protest over the legalisation of the Communist Party.

The sources said that Adm. Amador Franco was a friend of Navy Minister Adm. Gabriel Pita de Veiga who resigned last night for the same reasons.

Adm. Amador Franco's resignation was "irrevocable", the sources added. He had informed King Juan Carlos of his decision.

The outcome of last night's meeting appeared to end the reaction within the armed forces over the legalisation of the

communists, sources said.

The generals had widely debated the issue and finally agreed on three major points. They express (1) "certain repulsion" over the move which was not generally approved, however, (2) they accepted it as a "fait accompli" because of their patriotism and their duty in the service of the country.

Thirdly they informed the government that the army was indissolubly one for the defence of the unity of the country, the flag, the crown and the honour and discipline of that army.

The generals' statement meant that only the resignation of Adm. Gabriel Pita de Veiga, 67, and his friend Mr. Enrique Amador Franco publicly demonstrated the discontent in certain military circles with the government decision, government sources said.

Meanwhile Communist Party leaders today announced they had postponed demonstrations to mark the government decision, for "obvious reasons of prudence."

Similarly the return from years in exile in Moscow of Spanish Communist Party President Dolores Ibarruri, la Pasionaria, is expected to be put off for a more favourable date and a rural tie planned for April 17 has been cancelled.

Any demonstration of "triumph" in the present political climate would be read as a provocation to the many rightist pro-Franco elements in the military hierarchy and Communist Party. Secretary General Santiago Carrillo was intelligent enough to recognise the fact for himself, government sources said.

In a cable to OAU

Sudan rejects Ethiopian charges of military intervention

KHARTOUM, April 13 (R). — Sudan today rejected charges that its troops had intervened in neighbouring Ethiopia, and said Ethiopian soldiers and aircraft had in fact violated Sudanese territory.

The denial was made in a cable to the Organisation of African Unity (OAU), published by the Sudan News Agency.

Ethiopian head of state Mengistu Haile-Mariam last night accused Sudanese leader Jaafar Numeiri of aggression and "openly violating the honour and unity of Ethiopia."

This followed earlier criticism from Addis Ababa that Sudan was supporting secessionist guerrillas fighting government troops in Ethiopia's Red Sea province of Eritrea and

anti-government forces in the border area between the two neighbouring states.

Sudan described the allegations as baseless, unfounded and devoid of sense and said the Ethiopian government "resorted to such shameless accusations of foreign intervention in its civil war to cover up the military reverses its embattled army is experiencing on the battle field."

It had always been Ethiopian troops which made constant armed pursuits into Sudan in hot pursuit of Eritrean guerrillas, the cable said, and the Ethiopian air force had made innumerable incursions into Sudan's air space.

The cable added that, since civil war broke out in Ethiopia, the Sudanese government had

spared no effort to persuade the different parties to resort to negotiation rather than military confrontation.

It referred to a peace initiative by President Numeiri, and said the Ethiopian government has systematically frustrated these efforts by escalating its war of extermination against Eritreans.

The cable accused Ethiopia of having "confiscated the radio Voice of the Gospel and of having put it at the disposal of anti-Sudanese elements to be used for propaganda to disseminate hatred and perfidy."

As a founding member of the OAU, the Sudan will "adhere strictly to the OAU charter and dedicate itself to the realisation of its lofty principles," the cable said.

Arab Potash Company holds general meeting

AMMAN (JNA). — A general meeting of the Arab Potash Company took place here Wednesday to hear a report from Chairman Ali Al Khasawneh on the project's progress, its economic feasibility and the reasons for the Jordanian government to raise the company's capital to JD 40 million.

The meeting was attended by members of the Administrative Board and representatives from the shareholder governments of Syria, Lebanon, Iraq, Egypt and Kuwait, as well as from the public sector.

Mr. Al Khasawneh expects the first stage of the project to be completed by next August. Steps have been taken to advance the implementation of the second and last stages so that production can start by the end of 1981.

The chairman said the Jordanian government will participate with a 51 per cent share, and the Arab Mining Company with 40 per cent. The remaining nine per cent will be left for the old shareholders in the Jordanian private sector or other Arab states.

RSS PUBLISHES

ECONOMIC STUDY

AMMAN (J.T.). — The Economics Department of the Royal Scientific Society (RSS) has just published an interesting study entitled: "The Economic Realities of Jordan 1976-77", which should find its way into the collection of any budding economist here. "The Economic Realities" includes a systematic analysis of the main economic indicators of the major sectors in the economy. This analysis revealed that there was a marked increase in economic activity during the year up to mid-1976, which was represented by a general rise in total demand. The main causes for this rise, however, were found to have been rather temporary in nature. Once these causes receded, there was a gradual slowdown in the activity of some sectors in the economy. "The Economic Realities" also discussed the various interacting forces in the economy. The study ended with a brief note on the policies needed to promote more balanced growth in the various sectors of Jordan's economy.

Cabinet approves foreign company law amendment

AMMAN (J.T.). — The Cabinet approved a new amendment to a law on foreign companies registration at its weekly session Wednesday. This new amendment gives the minister the right to cancel a registration of any foreign company doing business inside a kingdom.

AMMAN'S MAYOR OPENS SOVIET PHOTO EXHIBITION

AMMAN (JNA). — The Mayor of Amman, Mr. Ma'an Abu Nuwar, opened a photo exhibition about cooperation and friendship between the Soviet Union and developing states at the Soviet Cultural Centre here Wednesday.

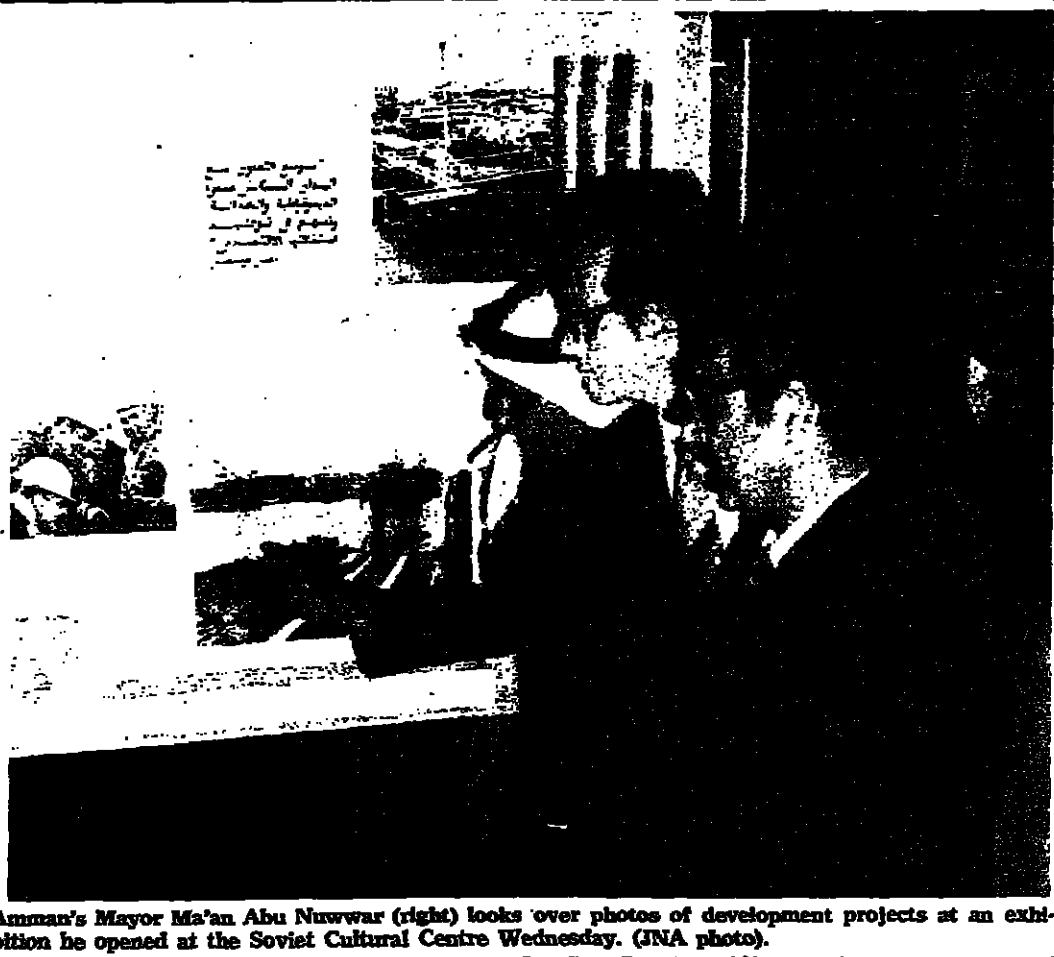
The exhibition, which will last a week, includes pictures and drawings of development projects, which the Soviet Union has carried out in the developing world, as well as of visits made by leaders of Third World countries to the Soviet Union to reinforce cooperation and friendship.

The exhibition also includes copies of agreements signed by the Soviet Union with developing countries for loans and the training of personnel.

The exhibition highlights the Soviet Union's role in helping Arab countries economically. Up to the present, 400 economic projects have been implemented — providing more than 50 per cent of productive electric power in the Arab countries, 70 per cent of steel production, 35 per cent of refined petroleum and 20 per cent of production in the chemical industry.

IMAM SADR ARRIVES HERE

BEIRUT, April 13 (JNA). — Imam Moussa Sadr, the President of the Shi'a Higher Council in Lebanon, arrives in Amman tomorrow on a two-day visit to Jordan. During his visit, Imam Sadr will meet with His Majesty King Hussein and a number of officials.



Amman's Mayor Ma'an Abu Nuwar (right) looks over photos of development projects at an exhibition he opened at the Soviet Cultural Centre Wednesday. (JNA photo).

Housing experts press for Arab housing bank

AMMAN (JNA). — The Arab Housing Seminar has recommended the establishment of an Arab housing bank, in which all Arab countries would participate.

The seminar, which ended five days of meetings here Wednesday, called on Arab states to provide urgent financial and technical assistance to implement necessary housing projects in the occupied Arab territories to prevent them being vacated by their inhabitants. It also called for the construction of new towns and villages in these territories and the reconstruction of houses destroyed by the Israeli occupation authorities.

The seminar, which convened here to discuss housing problems in the Arab World and try to find solutions to these problems, recommended the adoption of a consistent policy aimed at providing land for housing purposes at reasonable

prices. It also called for the implementation of resolutions adopted by the conferences of Arab housing ministers held in Dubai in 1975 and Baghdad this March.

Exchange of information and experience among Arab housing research centres was also recommended, besides the creation of vocational centres to train construction workers.

The conference condemned Israel's arbitrary measures against the Palestinian people in the occupied lands aimed at draining them of their inhabitants and destroying Arab villages in order to set up Jewish settlements in their place.

In the communiqué issued at the closing session Wednesday the conference called on the world community to support the legitimate rights of the Palestinians and condemn Israel's actions, which are in direct violation of all international conventions and treaties.

Uranium talks proceed with German firms

AMMAN (JNA). — Al Shaab newspaper reported Wednesday that contacts were currently being made with two German firms on the possibility of extracting uranium from the ores of Jordanian phosphates during the process of manufacturing chemical fertilisers.

A survey indicated that the uranium content in Jordanian phosphates was second to the phosphates of Florida.

WORLD BANK AGREES ON \$40m LOAN

AMMAN (Agencies). — Mr. Mumar Benjenk, Vice President of the World Bank, said today the bank would advance Jordan loans totalling \$40 million for an Amman water supply project and a scheme to extract potash from the Dead Sea.

Mr. Benjenk left here Wednesday after a four-day visit to discuss the projects with Jordanian officials.

The bank also agreed to take preparatory steps to finance the Maqarin Dam, modernisation of irrigation in the Jordan valley and several rural development projects.

Exchange Rates

Following are the official exchange rates in effect at the start of today's business day, as set by the Central Bank of Jordan.

The first column is how much you would receive in Jordanian fil for selling a unit of the foreign currency, while the second column denotes how much it would cost you to buy a unit of the foreign currency:

U.K. sterling	571.0	577.0
U.S. dollar	331.0	333.0
German mark	139.1	139.5
French franc	66.8	67.0
Swiss franc	130.9	131.3
Italian lira (for every 100)	37.4	37.6
Saudi riyal	93.6	93.8
Lebanese pound	109.4	109.6
Syrian pound	81.6	82.0
Iraqi dinar	942.0	950.0
Kuwaiti dinar	1,150.0	1,155.0
Libyan dinar	800.0	820.0
Egyptian pound	470.0	471.0
UAE dirham	85.2	85.5

NATIONAL NOTES

* AMMAN. — An authoritative source at Alia, the Royal Jordanian Airline, has said that regular flights to North Africa will start from June 1.

* AMMAN. — His Majesty King Hussein has cabled his condolences to North Yemeni Premier Ibrahim Al Hamdi on the death of the late Abdallah Al Hajri, a former Yemeni prime minister who was assassinated in London a few days ago.

* AMMAN. — Al Shaab newspaper reported Monday that Jordan's deposits of phosphates were estimated at 1,843 million tons at the end of 1976.

* AMMAN. — The delegation of the Regional Centre for the Rehabilitation of Blind Women returned here Wednesday after a seven-day visit to Bahrain, during which its members visited a number of centres for the teaching and rehabilitation of the blind.

The violin and piano fill Amman with classical music tonight

AMMAN (J.T.). — The classical world of the violin and piano comes to Amman today in form of a concert of works by Beethoven, Schubert, Tchaikovsky, Leclair and Hindemith.



Walter Engelmann

If this is the particular world that interests you, get along to the Hays Arts Centre by 7.30 p.m. tonight.

The musicians are a talented West German violinist Walter Engelmann, and an up-and-coming young Jordanian pianist Huda Sha'aban.

Huda Sha'aban, who is now a piano teacher, studied the art at the Musikhochschule in the West German city of Karlsruhe.

Walter Engelmann, who is here for the second time, studied at Munich's Musikakademie under a famous Bach interpreter — Prof. Olte Buechner. He is specialised in chamber music and has given many performances inside and outside his home country. He is particularly well known in Cairo, where he performed many concerts during his stay there from 1969-74.

Besides Prof. Buechner, he is considered the only artist



Huda Sha'aban

who can play the violin with the baroque round bow — the Rundbogen — which enables him to play all four stings at the same time.

During his previous stay here in 1976, he played the works of a Jordanian composer, Abdul Hamid Hamam.

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New techniques enable biologists to manipulate genetic blueprints

SAN FRANCISCO, (CSM). — Robert Sinheimer, chairman of the biology division of the California Institute of Technology, shook his head sadly. "I hadn't anticipated anyone would do it," he said, "it seems so stupid."

He was referring to experiments in which unknown bits of genetic material from two different kinds of organisms are put together at random. This is made possible by a set of revolutionary techniques that enable biologists to manipulate directly the genetic information that underlies organic life.

As a research tool, these techniques may be the most important, single advance for biologists since the microscope. With it, they can isolate the genetic blueprints of living organisms. They can translate those blueprints in detail. They can dissect, reorganize, and re-write them. And they can combine parts of the blueprints of different organisms to produce new, unnatural specifications.

With such an awesome ability to interfere with organic evolution in their hands, Dr. Sinheimer says he expected his colleagues to proceed with caution. But the kind of random experiment he cited, known as a "shotgun" by the trade, seems to him to typify a hasty eagerness to capitalize on this newfound ability without thinking through its deeper implications.

However, Dr. Sinheimer admits he is a lonely critic. Most biologists in this field feel they have done their duty to society by submitting to a self-imposed research moratorium a few years ago. They recognize that careless use of their genetic rewrite power could produce test tube monsters, microbes that might be dangerous.

They held back while safety guidelines were worked out. Last year, the National Institutes of Health (NIH) issued those guidelines and the biologists want to get on with their work.

Nevertheless, pursuit of this research promises to bring biologists and the general public into the most far-reaching confrontation they have had since the 19th-century debates over Darwin's theory of evolution, as the following straws in the wind suggest:

— Friends of the Earth is preparing to make this research a major national issue. The British-U.S. ecological group emphasizes both the potential environmental hazards of inadvertently creating dangerous organisms and the uncertainties of interfering with evolutionary process raised by Dr. Sinheimer.

— Local and state governments are beginning to express

official concern. Last year, New York State's attorney general held hearings on the safety of this research. California is holding legislative hearings this year.

And in what may be the most significant development, Cambridge, Massachusetts, was, at this writing, considering clamping city control on all such research carried on at Harvard University, the Massachusetts Institute of Technology, or elsewhere in the city.

— If, as now is expected, bills are submitted to House and Senate calling for federal regulation of the research, the entire issue, from safety to long-range wisdom, probably will receive a major public airing.

Meanwhile, the biologists themselves appear more concerned with avoiding delay in their research than with public repercussions.

As Maxine Singer of NIH, one of the authors of the safety guidelines, explained at a congressional seminar in December: To biologists, the hazards of this work seem "speculative and unproven." The researchers, she said, have shown "good sense and openness. The only course now is to proceed with prudence and continue using our limited knowledge to light our way."

The alternative, she added, is to delay indefinitely the benefits of knowledge that will flow from this research. To understand what excites the biologists, you have to know a little about the material they're working with — the genetic molecule. They call it DNA (for deoxyribonucleic acid). It looks like a long, twisted ladder. Its sides are of sugar, its rungs of four different varieties of the type of chemical known as a base. Just as the dots and dashes of Morse code encode information that can be read by a telegrapher, so do the sequences of these four bases encode information that can be read by the chemical machinery of living cells.

This is the genetic information that, according to current genetic theory, underlies the development, form, and function of all organisms, from bacteria to humans, and is passed on from generation to generation.

Most of this information determines which proteins a cell makes and when it makes them. Any specific sequence of DNA bases that encodes the information for one specific protein is called a gene. The blueprint of a simple bacterium may have a thousand genes, while the gene content of human DNA runs into the millions.

After three decades of research, biologists know the alphabet of the genetic code. They know something about the length and variety of a

few dozen sentences, and can even write simple sentences. But they don't know the rules of composition.

Until recently, they had no systematic way of getting at the relationships of the millions of significant different bits of the DNA blueprints in higher cells and organisms. The last five years have swept away this limitation.

Biologists have found chemical scissors (they call them restriction enzymes) which cut DNA molecules at specific points. The snipped-out frag-

ments can be welded together to form new DNA molecules, new genetic blueprints, and inserted into laboratory-bred bacteria, where they are copied and handed down to each new generation.

As these organisms multiply, doubling say every 20 minutes, so, too, does the DNA increase. In this way, genes wanted for study can be produced in large quantities. Thousands of billions of identical copies of such genes can be produced for detailed chemical and biological studies, something impossible with older genetic techniques. This is the process, as biologists relate it:

Sometimes researchers use microscopic organisms called viruses to carry genes into bacteria. A virus is a tiny life form, consisting largely of DNA, that can insert its DNA into a living cell. That viral DNA then commandeers the cell's chemical machinery for its own purposes.

Using their chemical scissors, genetic engineers snip away parts of a virus's DNA and substitute bits of foreign DNA they want to study. The virus then carries this into laboratory-bacterial cells, where the foreign DNA produces its

characteristic proteins and is itself multiplied as the bacteria reproduce. Another way to get foreign DNA into a bacterium is to use something called a plasmid. This is a circular piece of DNA, found naturally in bacteria, that can penetrate bacteria from the outside. Again, genetic engineers use their chemical scissors to ship out a bit of the circle which they then replace with the material they want to study.

At a stroke, these techniques of "recombinant DNA," as they are called, have removed the biologists' old frustration at not being able to manipulate genetic blueprints directly. This has raised visions of getting at diseases biologists think have a genetic base. It has created hopes of tailoring gene-shuffled bacteria to produce such commercially valuable chemicals as insulin cheaply and in large quantities. It has also inspired visions of redesigning food crops to make their own fertilizer and be more productive.

In short, to quote the recent report of the Princeton University Biohazards Subcommittee: "This discovery has generated enormous intellectual excitement among molecular biologists... (It) will have at least as profound an influence on the life sciences as has the discovery of the basic structure and function of DNA."

But just as biologists were eagerly seizing this marvelous new research tool, they realized they were grasping a two-edged sword. If do-it-yourself genetics could create interesting new forms of DNA, it could also create monsters, microbes never before known on earth that might pose dangers for plants, animals, or people.

Thus, in 1974, biologists imposed their voluntary moratorium on organisms isolated in the laboratory.

Physical requirements run on an increasingly strict scale from P1 to P4 ("P" for precautionary). P1 and P2 are more or less normal facilities for microbiotic research. P3 and P4 are much tighter facilities with filtered air and water, negative air pressure to prevent drafts leaking outside, and other such measures.

For one thing, they aren't universal. While NIH supports most academic research in biology — and while the Department of Defense, Energy Research and Development Administration, and National Science Foundation have adopted them — the guidelines do not cover industry or laboratories with independent funding and do not have the force of law.

There is growing pressure for Congress to write the guidelines into a universally applicable law.

Secondly, a few critics, of which Dr. Sinheimer is the leading example, point out that the guidelines are narrowly concerned with safety. They say nothing about the broader implications of this research. Dr. Sinheimer made this point at the seminar at which Dr. Singer spoke, a session sponsored by the congressional Environmental Study Conference and the Scientists' Institute for Public Information.

"The NIH guidelines," he explained, "don't deal with gene transfer across species barriers in general. Consider what's involved: An insect DNA cut into thousands of pieces any or all of which are inserted into bacteria and multiplied. It is assumed there is no danger. I don't know there is no danger, and as far as I know neither does anyone else."

At their strictest, these requirements equal those of biological warfare laboratories, or, in sum, which ended with release of the NIH guidelines last year. These guidelines rely on a combination of good housekeeping, physical containment, and a form of biological birth control to keep potentially dangerous of the lunar receiving laboratory at Houston, which was built to contain any alien organisms Apollo astronauts might have brought back.

"Biological containment" runs on a scale from EK1 to EK3. These refer to increasingly enfeebled forms of bacteria, used as experimental hosts, which are supposedly not able to survive outside the laboratory.

A complex set of rules specifies which types of experiments require what combinations of physical and biological containment. Some experiments judged especially dangerous are banned altogether. These include such things as increasing the virulence of known pathogens or making microbes more resistant to antibiotics.

Most biologists seem satisfied with the guidelines, to judge from a survey of biologists.

Base, Ohio. The air force is expected to select a winner between the Boeing and McDonnell Douglas crafts toward the end of this year. When and if Congress will decide to put the winner into actual production is unknown. But the air force talks about an initial purchase of 227 to 300 aircraft.

W.T. Hamilton, a top Boeing executive, figures the total market worldwide for the huge cargo plane could be 1,000 over a 20-year period.

An engineer, Mr. Hamilton is obviously fascinated by the new technology incorporated in the YC-14. One important novel feature is what airmen call "upper surface blowing." (Boeing ranks its use as an aviation milestone.) This means that the craft's two powerful jet engines blow air over the wing and flaps, creating powered lift.

A cargo plane landing on a short field requires a very slow approach speed. Under previous technology, that slow speed could only be achieved with relatively large wings, when the load is as great as that demanded by the air force. Powered lift makes the YC-14 wing length feasible.

Essentially, upper surface blowing takes advantage of a jet flow's tendency to follow the surface it is passing, even though that surface turns away from the flow's original direction. This tendency is known as the Coanda effect after a Belgian scientist, Henri Coanda, who investigated the phenomenon before World War II.

On the YC-14, trailing-edge flaps just behind the two General Electric 51,000-pound thrust CF-6-80 engines are designed so that the engine exhaust sheathes their surface as the flaps curve downward. Turning the high-speed flow this way provides a lifting force almost equal to the total amount of engine thrust used.

This extra lift means the plane can go from brake release to lift-off in 10 seconds. It then can climb at 6,000 feet per minute, reaching 35,000 feet in 10 minutes while spiraling inside a radius perimeter as tight as 2,000 feet.

From a military standpoint, this enables the YC-14 to avoid mountains — or other obstructions at a small field, and reduce the exposure to enemy fire.

From a civilian standpoint, the ability to climb rapidly and land in a tight circle makes the YC-14 a desirable cargo plane at airports where noise is a severe problem. In addition, the above-mentioned placement of the engines helps reduce noise — by a substantial five decibels.

When landing, jet aircraft use thrust reversers — a set of braking system that employs the thrust of the engines to slow the aircraft. On some airplanes, the thrust reversers are directed toward the ground, potentially stirring up dirt and rocks that can be sucked in the engines and cause major damage.

On the YC-14, the thrust reversers are mounted above the engines and point upward. This avoids the problem of ingestion on rough fields. It also helps increase braking effectiveness by the downward flow on the craft.

Further advanced technology is used in the flight control system on the YC-14. It employs a triply redundant electronic system that automatically maintains the airplane's speed and attitude in relation to ground during the crucial landing phase.

This is important because wind changes have a great effect on a slow-moving plane. It automatically adjusts the plane to a low-draw setting if one of the airplane's two engines fails during a landing approach.

Last month, it issued its report recommending that recombinant DNA research be allowed in Cambridge. This was to be done under the NIH guidelines, with certain stricter provisions attached.

The most significant of the added provisions would be establishment of a permanent citizen watchdog committee to oversee all such research in the city. If this is enacted into law, it will set a precedent for grass-roots participation in the decision of this research that could have wide repercussions.

There is no longer any issue as to whether or not biologists will go ahead. Somewhere between 100 to 200 laboratories in the United States or overseas already have their research in progress, according to Dr. Singer.

The issue now is where, how fast, and in what direction this work should proceed and to what extent these decisions will be made with the advice and informed consent of the public.

It will be a long and continuing dialogue between experts and laymen. As Princeton University Biohazards Subcommittee noted with prophetic vision: "On a larger time scale of say 50 years, work on... recombinant DNA will likely lead to a world as different as today's world is from that of years ago. Many areas of present energy-intensive technology could give way to the sort of intricate enzymatic (chemical) machinery used by living things... It may be the most significant practical consequences of this research have not yet been thought of."

After stormy public hearings by the city council, a citizens committee that did not include one DNA biologist studied the matter thoroughly.

Boeing's new YC-14 looks like an ugly duckling but is a technological swan

SEATTLE, Wash. (CSM) — Oliver Bodeau, President of Boeing Aerospace Company, once noted that his company's newly developed YC-14 STOL (short takeoff and landing aircraft) "is fat and dumpy and sits on its haunches like a duck."

This ugly duckling, however, has an enormous business potential for Boeing. The Seattle aircraftmaker and McDonnell Douglas Corporation are locked in a competition for a multi-million-dollar order for the next tactical transport of the United States Air Force. The two firms were chosen in November, 1972, to build two prototypes each.

What's more, from a technical standpoint, the ugly duckling is a beautiful swan. It incorporates some new technology mostly unknown to the public.

With this new technology, the YC-14 will be able to: Lift 12,247 kilograms (27,000 pounds) of payload off a 610-meter (2,000-foot) field. That's twice the payload and half the field length that the air force's current C-130 transport aircraft can manage. The field length is also several times shorter than that required by a similarly sized airliner, the Boeing 727.

The cargo compartment is more than 13.5 meters (45 feet) long. That's large enough to carry nine fully loaded army jeeps, plus the personnel who could ride in them. Or it could carry the huge new military tanks — the M60 or West Germany's Leopards.

It can fly at jet speeds with a crew of only two — compared with four for the C-130. It can back up on the ground, using the thrust from its two engines' so-called "reversers". Boeing's two prototype YC-14s are currently undergoing year-long testing at Wright-Patterson Air Force

Base, Ohio. The air force is expected to select a winner between the Boeing and McDonnell Douglas crafts toward the end of this year. When and if Congress will decide to put the winner into actual production is unknown. But the air force talks about an initial purchase of 227 to 300 aircraft.

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With this new technology, the YC-14 will be able to: Lift 12,247 kilograms (27,000 pounds) of payload off a 610-meter (2,000-foot) field. That's twice the payload and half the field length that the air force's current C-130 transport aircraft can manage. The field length is also several times shorter than that required by a similarly sized airliner, the Boeing 727.

The cargo compartment is more than 13.5 meters (45 feet) long. That's large enough to carry nine fully loaded army jeeps, plus the personnel who could ride in them. Or it could carry the huge new military tanks — the M60 or West Germany's Leopards.

It can fly at jet speeds with a crew of only two — compared with four for the C-130. It can back up on the ground, using the thrust from its two engines' so-called "reversers". Boeing's two prototype YC-14s are currently undergoing year-long testing at Wright-Patterson Air Force

Base, Ohio. The air force is expected to select a winner between the Boeing and McDonnell Douglas crafts toward the end of this year. When and if Congress will decide to put the winner into actual production is unknown. But the air force talks about an initial purchase of 227 to 300 aircraft.

W.T. Hamilton, a top Boeing executive, figures the total market worldwide for the huge cargo plane could be 1,000 over a 20-year period.

An engineer, Mr. Hamilton is obviously fascinated by the new technology incorporated in the YC-14. One important novel feature is what airmen call "upper surface blowing." (Boeing ranks its use as an aviation milestone.) This means that the craft's two powerful jet engines blow air over the wing and flaps, creating powered lift.

A cargo plane landing on a short field requires a very slow approach speed. Under previous technology, that slow speed could only be achieved with relatively large wings, when the load is as great as that demanded by the air force. Powered lift makes the YC-14 wing length feasible.

Essentially, upper surface blowing takes advantage of a jet flow's tendency to follow the surface it is passing, even though that surface turns away from the flow's original direction. This tendency is known as the Coanda effect after a Belgian scientist, Henri Coanda, who investigated the phenomenon before World War II.

On the YC-14, trailing-edge flaps just behind the two General Electric 51,000-pound thrust CF-6-80 engines are designed so that the engine exhaust sheathes their surface as the flaps curve downward. Turning the high-speed flow this way provides a lifting force almost equal to the total amount of engine thrust used.

This extra lift means the plane can go from brake release to lift-off in 10 seconds. It then can climb at 6,000 feet per minute, reaching 35,000 feet in 10 minutes while spiraling inside a radius perimeter as tight as 2,000 feet.

From a military standpoint, this enables the YC-14 to avoid mountains — or other obstructions at a small field, and reduce the exposure to enemy fire.

From a civilian standpoint, the ability to climb rapidly and land in a tight circle makes the YC-14 a desirable cargo plane at airports where noise is a severe problem. In addition, the above-mentioned placement of the engines helps reduce noise — by a substantial five decibels.

When landing, jet aircraft use thrust reversers — a set of braking system that employs the thrust of the engines to slow the aircraft. On some airplanes, the thrust reversers are directed toward the ground, potentially stirring up dirt and rocks that can be sucked in the engines and cause major damage.

Businessman leaves city to take part in farming rat-race

Many people would like to get out of the urban "rat-race" and back to the simple life on the land. The question is -- are they rich enough?

LONDON, (E.T.) — I am continually being badgered by individuals who tell me they wish to leave the rat-race of modern life, buy a cottage in the country with a few acres, and spend the rest of their lives

doing whatever they like with just enough effort to gain sustenance from their land and their livestock.

What, they ask me, is the best way of going about it? The

ideal course would be to go and spend some time with those who are condemned to subsistence farming for life, the Indian or Southern Italian peasants for instance, tied to an insufficient acreage in an erratic climate, subject to the extortions of money lenders, merchants, politicians and other exploiters of the poor and ignorant.

I speak from experience. I have found that the only way in which I can secure the freedom to lead my own life and defy the exploiters, who are just as potential a threat in the English countryside as in Bangladesh, is to take part in the farming rat-race.

I have done so with enough application to build a sizable business, which is at last economically strong enough to employ workers to leave me time to go fishing whenever I wish. It has been a life's work and I am almost too old for serious fishing.

Farming is a rat-race on almost any scale, and a great deal more competitive than most. It is not, on the small-holder scale anyway, an occupation that can be left alone for any length of time.

If you have one cow she has to be milked twice a day, fourteen times a week for at least nine months and then she goes dry for a short time before calving again. Milking is not a hard chore, but it's very boring and probably with washing up the utensils will take two or three hours of the day. If you cut corners -- say by not scouring the utensils -- the milk goes bad, the baby has colic, and your wife starts asking for the dairy to leave it in bottles.

Why keep a cow? Simply because a cow is the most efficient converter of a farm's resources into human food, be the resources grass, turnips or cereals. But even these cost money. Grass will not grow without fertilizer or at least not very well. Cereals have to be bought, or if you grow them the cost is some £20 to £30 per acre. So you need to have something to sell in order to pay the costs.

You reason -- I am assuming here that you are a reasonable human being who got the urge towards the simple life simply because you had got far enough up the ladder of conventional life to be able to think beyond next week's salary. You reason, as I said before I interrupted myself, that the thing to do would be to milk several cows, which would give you sufficient income to pay the costs and leave a surplus for buying some of the essentials such as tea bags, petrol for the car and a colour television. To say nothing of rates on the house and heating and lighting.

But with a commercial dairy you would be into the rat-race with a bang, with no statutory holidays and no occupational pension at the end, if you survive that long.

Keeping just one cow is no real problem, except for the work involved, but once you increase the number you treble the chances of disease, of deficiencies of fodder, or persuading them to take the bull and keeping them in milk. And the more you intensify the more you are at risk.

All right, you say. Let's keep hens. They can be fed once a

day. True, but they also need looking after and they eat a great deal of expensive feed. So much so that the margin between the cost of feed and the price you get for your eggs is such that no one can earn even a farm-worker's wage with less than say the produce of 10,000 hens.

Also, in order to make the best use of the food, they have to be expensively and efficiently housed.

And housing costs money. Your 10,000 hens would cost at least £10,000 fully equipped. Your working capital in livestock would be as much again.

Have you got, say, £20,000 to invest in what is a shaky enterprise financially? It can be done for less with cheap and nasty buildings and inferior stock, but then the extra work and anxiety will make you think running a supermarket or working in a bank or the civil service highly desirable.

So what about vegetables? One can eat them and also sell them for the cash which by this time it is obvious will be essential. Many people have done very well.

It is true that in the drought of last year those who were fortunate enough to water their gardens legally -- or illegally -- sold runner beans and lettuces at enormous prices. One friend of mine was making £20 per week from a quarter acre of garden in such a way. But if instead of runners he had had tomatoes he would have found his crop unsaleable.

In normal times the business of horticulture is in the hands of professionals, as is the rest of farming.

The only answer for those who wish to join the industry, on however small a scale, is to become as professional in their attitudes as their neighbours. Otherwise they would be wasting their assets of land, labour and ability, and getting very little satisfaction into the bargain.

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ECONOMIC AND BUSINESS NEWS

Negotiations begin in U.K. for Phase Three of "Social Contract"

LONDON, April 13 (AFP). — The government and trade unions today began negotiations for a third year's "Social Contract" starting in August.

The government team, led by Chancellor of the Exchequer Denis Healey, will be seeking the unions' consent to "Phase Three" of the contract that provides for tough curbs on pay rises.

Mr. Healey declined comment as he arrived for the talks while Trades Union Congress (TUC) officials generally expected the discussions to be "difficult".

Last month's budget by Mr. Healey was a carrot-and-stick package including an immediate income tax cut and a promise of more if "Phase Three" is successfully negotiated.

Postmen's leader Tom Jackson earlier said his union could not agree to a further drop in its members' living standards.

Mr. Clive Jenkins, head of the white collar workers' union, said the economy needed a boost, implying a rise in wage-earners' purchasing power.

Several unions want a return to free collective pay bargaining.

Japan-USSR fishing talks resume

MOSCOW, April 13 (AFP). — Soviet-Japanese negotiations over an interim fishing agreement resumed here today after a one-day interruption requested by the Soviet Union, a Japanese source disclosed.

On Monday, the Soviet Union

dropped its demand for the right to fish in Japanese territorial waters when they are extended to 12 miles from the coast from the present 3-mile limit, the source said.

The Soviet demand was one of two major obstacles blocking conclusion of the agreement.

It was due to be signed on March 30. But negotiations were broken off in late March and only resumed last Friday between Soviet Fisheries Minister Alexander Ishkov and Japanese Minister of Agriculture Zenko Suzuki.

The other obstacle is the problem of the Kuril Islands which the Soviet Union has held since World War II north of Japan, but which are still claimed by the Japanese.

The interim agreement will be a preliminary to a long-term agreement to replace the fishing agreement of 1956. The latter was outmoded by the unilateral decision by the Soviet Union to extend its protected fishing zone to 200 miles from its coasts.

Deserts are moving closer, says U.N. official

NAIROBI, April 13 (R). — The steady encroachment of deserts into once-productive land areas is costing the world economy more than \$10 billion a year, a United Nations expert said here yesterday.

Man has created 9 million sq. kms. of desert on the earth and two-thirds of the world's nations are now directly affected by the spread of deserts, according to Dr. Mostafa Tolba, Secretary General of the United Nations Conference on Desertification (UNCOD).

He was speaking at the first meeting of the African preparatory session for the desertification conference, to be held here from Aug. 29 to Sept. 9.

Following the six-year drought in the Sahel regions below the Sahara, the U.N. General Assembly in December 1974 decided on international action to stem the spread of deserts and called a conference for 1977 after surveys and studies and a new map of world deserts had been made.

Dr. Tolba said that according to climatic data "arid and

semi-arid lands make up 36 per cent of the earth's land surface... however when based on soil and vegetation data the total area amounts to 43 per cent of the earth's land surface.

"The difference is accounted for by the estimated extent of man-made deserts -- 3.5 million sq. miles (9 million sq. kms.) -- an area greater than Kenya, Uganda, Tanzania, Ethiopia, Somalia, Sudan and Zaire combined."

He said there were no authoritative figures but it was estimated that between 50,000 and 70,000 sq. kms. of land turn to desert each year.

"If an arbitrary value of \$2,000 per hectare is applied to land, the annual economic loss due to desertification is in excess of \$10 billion."

The meeting here follows other regional meetings in Chile and Portugal. A fourth and final preparatory meeting will begin in New Delhi next Tuesday.

Among other schemes the African meeting will study attempts to plant a "green

Kuwaiti oil official: OPEC price split will end during July meet

KUWAIT, April 13 (R). — The world's major oil exporting states were expected to end the present two-tier oil price system at the next OPEC ministerial conference due to be held in Stockholm on July 12, a leading Kuwaiti oil official was quoted as saying here today.

Dr. Mahmoud Al Nusseir, Assistant Oil Ministry Under-Secretary for Economic Affairs, told local reporters here last night that points of view among the member states of OPEC (the Organisation of Petroleum Exporting Countries), had been brought much nearer due to the extensive efforts of many states.

There was now a movement towards an acceptable solution which will be agreed at the next meeting, he added.

Dr. Al Nusseir, praised Saudi Arabia for refraining from increasing its oil production after its rejection of a majority OPEC decision to raise prices by 15 per cent in two stages this year.

The United Arab Emirates (UAE) was the only other OPEC

state to follow the Saudi lead of increasing prices by 5 per cent on Jan. 1. The other 11 OPEC states raised theirs by 10 per cent.

Dr. Al Nusseir said "oil sales of the majority were not very badly affected by the dual price system for two main reasons: Saudi Arabia's decision not to increase production and the increase in world demand for oil due to the severe winter in the United States and Europe."

"Saudi Arabia's was a noble action which will never be forgotten," he added.

He said these reasons had also obviated the need for an emergency OPEC meeting to tackle the price differences.

Dr. Al Nusseir did not, however, say anything about a possible "consultative" meeting between the OPEC states before the July 12 conference.

Chief Kuwaiti government spokesman Abdul-Aziz Hussein said on Sunday that the oil states were likely to hold such a meeting on prices shortly.

U.S. Federal Reserve Board's head suggests world economic measures

NEW YORK, April 13 (AFP). — International economic measures including energy saving and currency adjustment have been proposed here by Mr. Arthur Burns, head of the U.S. Federal Reserve Board.

His suggestions, which some observers linked to next month's western economic summit in London, included strict energy saving measures and the

speedier use of new energy resources. This was especially desirable in the case of the United States, he said.

The members of the Organisation of Petroleum Exporting Countries (OPEC) should avoid raising their prices to offset a consumption drop stemming from the conservation moves, he said.

Mr. Burns also said nations with payments surpluses should let their currencies rise on the money markets so that deficit nations could sell their products internationally.

"The Fed" chief further proposed that the resources of the International Monetary Fund (IMF) be augmented.

Mr. Burns noted that oil importing countries' debts seemed less easily offset today by the exporting countries' purchases.

"Contrary to earlier widespread hopes that the aggregate OPEC surplus would continue to decline, perhaps nearing elimination by the end of this decade, it seems at present to be eroding slowly if at all," he said.

Gold moves up sharply in early London trading

LONDON, April 13 (AFP). — Gold moved up sharply today to \$152.375 per ounce around noon against last night's \$149.875.

One reason given by dealers was the news from the United States that the U.S. authorities had no intention of selling gold at present.

This appeared to kill the recent rumour that the Treasury Department would sell if the market rate exceeded \$150.

Other reasons for today's jump were the weakness of the dollar, and a report in Barroos Weekly of the U.S. that the Arab countries are buying large amounts of gold.

Sources informed about Arab countries' gold requirements nearly said "no comment" to this report.

On the money market today, central banks intervened to help the dollar which rose slightly vis-a-vis the yen.

Earlier the Financial Times had commented that the scope for a further substantial appreciation of the yen was looking slim.

Japanese inflation this year was expected to be three or four points above that of the United States, and Japanese interest rates seemed set to move lower, thus eroding the attractive rate differential, the paper said.

Greece, USSR discuss Cyprus, Aegean dispute

ATHENS, April 13 (O). — Greece and the Soviet Union opened two days of talks today at which they are expected to discuss the Cyprus problem as well as the Greek-Turkish dispute over territorial rights in the Aegean.

The Soviet Union appears to be concerned that the Greek-Turkish dispute over oil rights on the Aegean's continental shelf could affect free navigation in the area.

The Soviet delegation headed by Mr. Vasil Groubiov of the Foreign Ministry, is scheduled to fly to Nicosia for similar talks from April 16 to 19. During the meeting in Athens, the two sides are due to discuss bilateral economic and political issues.

Sri Lanka prepares for "insurgency"

COLOMBO, April 13 (R). — Sri Lankan security forces are mounting a huge operation to prevent recurrence of the violent leftwing insurgency in 1971 during which an estimated 1,200 people died, according to the state-run Ceylon Daily News today.

Quoting official sources, it said the government was prepared to meet any contingency and that Prime Minister Mrs. Sirimavo Bandaranaike had briefed opposition leader J.G. Jayewardene on the situation.

The security scheme is operating from now until after the general election expected to be held between May 21 and the end of August.

A state of emergency imposed in March 1971 was lifted by the government in February this year.

At the same time a ban was removed from the militant leftwing Janatha Vimukthi Peramuna (JVP) the People's Liberation Front, which led the abortive uprising.

The Ceylon Daily News said today that pockets of insurgents were operating in various parts of the country and preparing to repeat the violence of 1971, which Sri Lankan security forces checked after two months with military aid from abroad.

Lebanon marks 2 years of civil war

By Xavier Baron

NICOSIA, April 13 (AFP). — Two years ago today a bus carrying 27 Palestinians was machine-gunned in a Beirut suburb, killing all the occupants and plunging the country into implacable civil war.

This incident can be pinpointed as having sparked off widespread hostilities, although there had been disturbing signs of tension in the preceding months.

It appeared to have been a revenge killing for the deaths of two rightwing Phalangists and it brought instant notoriety to the mainly-Christian district where it took place, Ain Remmaneh.

The bus attack marked the start of one of this century's most vicious conflicts, causing 50,000 dead, thousands more wounded and hundreds-of-thousands of displaced persons tossed from one region to another over the months as the fighting shifted.

Material damage runs into thousands of millions of dollars, the foundations of the state have been undermined, the economy shattered, national life paralysed and the very aspect

Pakistani ambassador resigns in protest against Bhutto's regime

MADRID, April 13 (R). — Pakistan's Ambassador to Spain, Air Marshal Abdul Rahim Khan, resigned today, saying he could not sit idly by and see his country being dragged into another civil war by a dictatorial regime.

The former Pakistani air force chief, 51, accused Prime Minister Zulfikar Ali Bhutto of breaking promises made to him and allowing general elections last month to be rigged so he could stay in power.

In a telegram to Mr. Bhutto, he said: "I cannot sit idly by and see the country being dragged into another civil war by power-hungry men."

I am therefore resigning in protest against your oppressive and dictatorial regime."

His resignation came after a wave of anti-government violence in Pakistan which has killed about 150 people since the elections.

A mass movement to unseat the prime minister was launched by the opposition Pakistan National Alliance which accused him of rigging the elections. Mr. Bhutto has denied the accusations.

Air Marshal Rahim Khan told a press conference Pakistan has been practically paralysed since the elections.

Asked if there was a real

threat of civil war, he said: "Not at the moment, but the way things are developing they could lead to civil war."

He said para-military forces and police controlled by Mr. Bhutto -- not the army -- were responsible for the shooting in Pakistan.

"The para-military forces and police are being used against the people," he said.

Air Marshal Rahim Khan, who was air force chief for three years until 1972, said he helped arrange free elections in 1970 which eventually brought

Mr. Bhutto to power. The ambassador said Mr. Bhutto "had promised him in 1970, while Pakistan was under military rule, that if he came to power, democracy would flourish."

In his telegram to Mr. Bhutto today Air Marshal Rahim Khan said:

"You have made a mockery of democracy in Pakistan. You have failed to keep your promises made to me."

"You have not honoured your pledges made to the people of Pakistan."

Scotland Yard hunts suspected killers of North Yemeni official

LONDON, April 13 (AFP). — Scotland Yard is hunting for three men and a young woman in connection with Sunday's killing of former North Yemeni Prime Minister Qadi Ali Hijri his wife and the embassy's chargé d'affaires, it was learnt here today.

Following publication of an identikit picture of the presumed killer, several people

told police that the suspect arrived in London with a friend and a young woman posing as his wife. The killing occurred in a street in London's fashionable Lancaster Gate.

Autopsies on the bodies showed the former prime minister died from a single bullet in the head, while his wife was hit in the chest and the chargé d'affaires in the heart.

At funeral of assassinated federal prosecutor

Schmidt lashes out at "terrorists"

KARLSRUHE, April 13 (AFP). — West German Chancellor Helmut Schmidt and most of his cabinet today attended the state funeral here of Federal Prosecutor Siegfried Buback, his driver and police bodyguard, murdered here last Thursday.

Mr. Schmidt pronounced the funeral oration in which he described Mr. Buback, driver Wolfgang Goebel and bodyguard Gerd Wunzer as "exemplary defenders of democratic order."

He stressed the danger of reacting emotionally to such horrifying crimes, which he said would be a sign of weakness.

"Terrorists hope that their violence will provoke uncontrolled frenzied violence by the democratic state so as to show it as a fascist state," the chancellor declared.

He warned those who might be tempted to offer ideological support to the terrorists "Terrorists cannot be regarded as political theorists."

"They are criminals in the eyes of God and of mankind and anyone who supports them defends their crime."

Mr. Buback and his driver were killed outright when a motorcycle passenger opened fire with a submachine gun on his car in central Karlsruhe.

It was announced today that the bodyguard had died in hospital from his wounds.

The West German DPA news agency office in Duesseldorf today received a letter from the self-styled Ulrike Meinhof Commando group which claimed to prove that the group had carried out the attack.

It was accompanied by a copy of the contract for the hire of the motorcycle used by the attackers.

The letter declared: "The Ulrike Meinhof Commando on Thursday, April 7 executed Federal Prosecutor Siegfried Buback who was directly responsible for the assassination of anarchists Holger Meins, Siegfried Hausner and Ulrike Meinhof."

It alleged that Mr. Buback arranged the murders of the three anarchists in cooperation with the West German secret service, the U.S. Central Intelligence Agency (CIA) and the Nato Security Committee.

A telephone caller claiming to represent the "Ulrike Meinhof Action Group" told DPA's Bonn office shortly after the attack that it was behind the killings.

Lebanon marks 2 years of civil war

By Xavier Baron

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The bus attack marked the start of one of this century's most vicious conflicts, causing 50,000 dead, thousands more wounded and hundreds-of-thousands of displaced persons tossed from one region to another over the months as the fighting shifted.

Material damage runs into thousands of millions of dollars, the foundations of the state have been undermined, the economy shattered, national life paralysed and the very aspect

of the country disfigured.

Two years on, the war has officially ended; but fighting is still going on in the south where Lebanese and Palestinians die daily under shells bullets.

Less than a month ago one of the main figures in the civil war, Lebanese leftist leader Kamal Junblatt was killed in an ambush on a mountain road.

Each side defends its own viewpoint regarding the origins of the seemingly endless crisis.

The Phalangists and their allies in the National Liberal Party (NLP) say the Palestinian resistance had become a state within a state in Lebanon, bringing Israeli reprisals and through its alliance with leftwing political forces, promoting a popular struggle which would sooner or later have been aimed against the Lebanese political system.

The Palestinian resistance, which exposed and acted as the catalyst for internal Lebanese problems, was convinced right from the start of the crisis that its very existence was at stake.

Events in the Arab World at the time were worrying for

the Palestinians.

Egypt was negotiating a second disengagement agreement in Sinai and neither the United States nor Israel was prepared to recognise the Palestine Liberation Organisation (PLO) which believed that there was an attempt to subjugate the Palestinian movement.

These difficulties would have been enough in themselves to destabilise this small country where 400,000 Palestinians live among three million Lebanese.

But to them were added other conflicts just below the surface such as the diversity and political rivalry of the various religious groups, social, economic and political unrest and the mass exodus of residents in south Lebanon towards the interior as a result of unremitting Israeli attacks.

This economic and social malaise first brought to light in 1960 in a study which stressed that "if the gulf separating the social classes continues to widen, Lebanon will progress towards a revolution by the underprivileged classes."

The prophetically-worded study added that if the status quo remained unchanged, Lebanon could expect "a revolution that would plunge the country into chaos and place it at the mercy of others."

Indeed, it was a non-Lebanese force of 30,000 troops that halted the fighting by moving into battle-scarred Lebanon, allowing a new President, Mr. Elias Sarkis, to assume office.

After more than 50 attempted ceasefires, generalised fighting ended last November leaving bitterness among the combatants.

As far as the rightwing were concerned, Palestinians were still in the country, notably in the south where the battle continues.

The leftist forces were unable, once they had the means to carry out the social revolution for which they were fighting.

The continuation of hostilities in the border region in the south is holding up economic recovery and preventing a social and political solution to the problem which would reunite the country and allow it to embark on reconstruction.

Beirut is still a divided capital and on bad days no cars dare cross the demarcation line.

WALL STREET REPORT

Prices were mixed Wednesday on the New York stock exchange, where the industrial average, which had lost as much as six points during the session, finally closed on a one point advance thanks to a late afternoon rally.

Trading was fairly active. Fears about President Carter's energy programme to be announced next week accounted for the initial decline, but investors were reassured during the afternoon by favourable comments on the economy made by Treasury Secretary Michael Blumenthal.

Gainers led losers at the bell by a 777 to 614 margin. IBM was a big loser, down five points to 273 5/8, following the publication of good, but lower than expected, quarterly earnings. Gold mines, aluminium and steel issues were among the stronger groups.

At the close, the industrial average shows at 938.18, a gain of 1.02 points; Transp at 230.86, a gain of 1.17; utilities at 108.19, a gain of 0.13. 21,800,000 shares changed hands, of which 4,470,000 during the last hour.

LONDON MARKET REPORT

Equities advanced further, Wednesday, helped by Wall Street's 13-point gain, but thin conditions accentuated price movements, dealers said. Trading interest was inhibited with the commencement of government-Trades Union Congress pay talks, they added.

At 15:00 the F.T. index was up 10.5 at 418.4.

Short-dated government bonds were subject to small demand and gained up to 9/16 point while longer loans finished unchanged. Gold shares advanced with the bullion price but were below the day's highs at the close. U.S. and Canadian issues firmed.

Fisons was 5p up while gains of 10p each were scored by Hawker, Tube Investments, Beecham and Reed Intl. Other industrials gained between 4p and 9p.

Oils firmed up to 7p and banks added between 5p and 8p. Second line stocks were higher over a broad front.

Trading statements made for advances in Blackwood Hodge and Babcock and Wilcox, while Dickinson Robinson ended little changed.

Price of gold closed in London Wednesday at \$125.25/oz.

ECONOMIC NEWS BRIEFS

* ANKARA, April 13 (AFP). — The first Iraqi oil will start flowing on Thursday through the new pipeline linking the Kirkuk oil fields to a terminal on Turkey's Mediterranean coast, reliable sources said here yesterday. They said Turkey would receive 150,000 barrels a day out of the total amount of 500,000 barrels which would be pumped through the pipeline daily. The price paid by Turkey would match Gulf rates, the sources said without elaborating. This followed an agreement between the Turkish Petroleum Office and Iraqi authorities.

* LONDON, April 13 (AFP). — Saudi Arabia will shortly agree a \$800 million military assistance contract with Britain running on from the 1966 deal worth \$425 million so far, Flight magazine said today. The renewal would be for four years it said. Mainly through the British Aircraft Corporation (BAC), Britain provides maintenance services for Lightnings, Strikemasters and other planes. It also trains pilots and technicians, supplies spares, and provides other services.

* TOKYO, April 13 (AFP). — The Japanese government today described as "deplorable" the U.S. Federal Customs Court ruling that countervailing duties must be imposed on Japanese colour-television sets. An official statement said the decision ran counter to a written "international rule" that exemption of export products from internal taxes such as the Commodity Tax in Japan does not constitute countervailable subsidy. It added that Japan "strongly desires" that U.S. government will make every effort to appeal the case to the final court, to prevent the decision becoming a "major obstacle to the development of international trade."

* TOKYO, April 13 (AFP). — China will shortly resume ordering Japanese capital equipment, the Association for the Promotion of International Trade said here today. Orders were suspended about a year ago as a result of the Chinese political and economic situation. Citing Chinese sources, the association said China had been making price inquiries with manufacturers and trading houses in connection with petrochemical, copper foundry, electronic and power station equipment.

WORLD NEWS BRIEFS

* TEL AVIV, April 13 (R). — The leader of Israel's rightwing opposition Likud Party, Mr. Menachem Begin, who had a heart attack last month, left hospital today. A hospital official told reporters that Mr. Begin, 64, had developed pneumonia after the heart attack. The official said Mr. Begin is expected to lead his party in the campaign for the May 17 general elections.

* NEW DELHI, April 13 (AFP). — Former Foreign Minister Mohammad Currim Chagla has suggested that a Nuremberg-type trial be held in India to go into the emergency excesses and punish those found to be guilty. Mr. Chagla, who was also formerly chief justice of the Bombay High Court, said that all those who supported the emergency and perpetrated injustices on fellow citizens should be "tried and punished like the war criminals during the Nuremberg trial." Mr. Chagla has been one of the few outspoken critics of former Prime Minister Mrs. Indira Gandhi for declaring the emergency, even while the severe restrictive measures were in force. He made the suggestion in a public speech at Bombay, Monday.

* DUBLIN, April 13 (AFP). — Lord Killanin president of the International Olympic Committee who had a heart attack yesterday is reported to be making "satisfactory progress" in St. Vincent Hospital here. Lord Killanin was taken to hospital yesterday evening after he collapsed at the Fairhoughs race horse track, near Dublin.

* TRIPOLI, April 13 (R). — Libya yesterday sent two notes to Arab and African governments to protest against what it called terrorist acts carried out by Egypt, the Arab Revolution News Agency of Libya (ARNA) reported. One note said Egyptian President Anwar Sadat had turned the Benghazi branch of the Egyptian relations office "into a den of conspiracies against the people" of Libya. The office was occupied by a group of workers and students three days ago. ARNA quoted the statement as saying Egypt had exploited diplomatic immunity to smuggle explosives into the country. "Doing away with the rules and norms of international law."

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